removing said insulating film by wet etching;

forming a gate insulating film on said semiconductor film after said removing said insulating film;

C1 cancel

forming a gate electrode on said gate insulating film; and

forming source and drain regions in said semiconductor film by ion doping through said gate insulating film.

13. (Amended) A method according to claim 37 wherein said channel formation region is substantially intrinsic type or p-type.

C2

16. (Amended) A method according to claim 58, wherein said channel formation region is substantially intrinsic type or p-type.

18. (Amended) A method for fabricating a semiconductor device, comprising the steps of:

forming a semiconductor film comprising amorphous silicon over an insulating surface;

forming an insulating film on said semiconductor film;

crystallizing at least a channel formation region of said semiconductor film by laser irradiation through said insulating film;

C3

removing said insulating film by wet etching;

forming a gate insulating film on said semiconductor film after said removing said insulating film;

forming a gate electrode on said gate insulating film, said gate electrode having tapered side edges; and

forming source and drain regions in said semiconductor film by ion doping,

wherein said channel formation region between said source and drain region has a first length at a surface being in contact with said gate insulating film and a second length at a surface being in contact with said insulating surface, and said first length is shorter than said second length.

C4

19. (Amended) A method according to claim 41 wherein said channel formation region is substantially intrinsic type or p-type.

23. (Amended) A method for fabricating a semiconductor device, comprising the steps of:

forming a semiconductor film comprising amorphous silicon over an insulating surface;

forming an insulating film on said semiconductor film;

crystallizing at least a channel formation region of said semiconductor film by laser irradiation through said insulating film;

G5

removing said insulating film by wet etching;

forming a gate insulating film on said semiconductor film after said removing said insulating film;

forming a gate electrode comprising aluminum on said gate insulating film; and

forming source and drain regions in said semiconductor film by ion doping through said gate insulating film.

G6

24. (Amended) A method according to claim 55 wherein said channel formation region is substantially intrinsic type or p-type.

G7

27. (Amended) A method according to claim 18 wherein said gate electrode is performed by a wet etching.

29. (Amended) A method for fabricating a semiconductor device, comprising the steps of:

forming a semiconductor film comprising amorphous silicon over an insulating surface;

G8 cont

forming an insulating film on said semiconductor film;

introducing boron into at least a portion of said semiconductor film through said insulating film, said portion to become at least a channel formation region;

crystallizing at least said channel formation region of said semiconductor film by laser irradiation through said insulating film;

removing said insulating film by wet etching;

forming a gate insulating film on said semiconductor film after said removing said insulating film;

G8 cancelled

forming a gate electrode on said gate insulating film; and

forming source and drain regions in said semiconductor film by ion doping.

G9

30. (Amended) A method according to claim 29 wherein said channel formation region is substantially intrinsic type or p-type.

G10

32. (Amended) A method according to claim 53 said source and drain regions are formed by said ion doping with at least one of phosphorus and boron.

34. (Amended) A method for fabricating a semiconductor device, comprising the steps of:

forming at least two active matrix panels over a substrate, a method for fabricating each of said active matrix panels comprising:

G11

forming a semiconductor film on an insulating surface;

forming an insulating film on said semiconductor film;

crystallizing at least a channel formation region of said semiconductor film by laser irradiation through said insulating film;

removing said insulating film by wet etching;

forming a gate insulating film on said semiconductor film after said removing said insulating film;

forming a gate electrode on said gate insulating film;

forming source and drain regions in said semiconductor film by ion doping; and

cutting said substrate into at least two portions to obtain said at least two active matrix panels.

37. (Amended) A method for fabricating a semiconductor device, comprising the steps of:

G12 Cont

forming a semiconductor film over an insulating surface;

forming an insulating film on said semiconductor film;

introducing boron into at least a portion of said semiconductor film through said insulating film, said portion to become at least a channel formation region;

crystallizing at least said channel formation region of said semiconductor film by laser irradiation through said insulating film;

removing said insulating film by wet etching;

forming a gate insulating film on said semiconductor film after said removing said insulating film;

G12 Cancel

forming a gate electrode on said gate insulating film, said gate electrode having tapered side edges; and

forming source and drain regions in said semiconductor film by ion doping,

wherein said channel formation region between said source and drain region has a first length at a surface being in contact with said gate insulating film and a second length at a surface being in contact with said insulating surface, and said first length is shorter than said second length.

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41. (Amended) A method for fabricating a semiconductor device, comprising the steps of:

forming a semiconductor film over an insulating surface;

forming an insulating film on said semiconductor film;

G13

introducing boron into at least a portion of said semiconductor film through said insulating film, said portion to become at least a channel formation region;

crystallizing at least said channel formation region of said semiconductor film by laser irradiation through said insulating film;

removing said insulating film by wet etching;

forming a gate insulating film on said semiconductor film after said removing said insulating film;

forming a gate electrode comprising aluminum on said gate insulating film;

forming source and drain regions in said semiconductor film by ion doping through said gate insulating film.

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53. (Amended) A method for fabricating a thin film transistor of a pixel portion in a semiconductor device, said semiconductor device having at least one thin film transistor comprising a semiconductor film formed adjacent to a gate electrode with a gate insulating film therebetween, said method comprising the steps of:

G14 Cont

forming said semiconductor film over a substrate;

forming an insulating film on said semiconductor film;

crystallizing at least a channel formation region of said semiconductor film by laser irradiation through said insulating film;

removing said insulating film; and

forming source and drain regions in said semiconductor film by ion doping,

wherein said gate insulating film is formed using TEOS.

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55. (Amended) A method for fabricating a thin film transistor of a pixel portion in a semiconductor device, said semiconductor device having at least one thin film transistor comprising a semiconductor film formed adjacent to a gate electrode with a gate insulating film therebetween, said method comprising the steps of:

forming said semiconductor film over a substrate;

forming an insulating film on said semiconductor film;

introducing boron into at least a portion of said semiconductor film through said insulating film, said portion becoming at least a channel formation region of said thin film transistor;

crystallizing at least said channel formation region of said semiconductor film by laser irradiation through said insulating film;

removing said insulating film; and

forming source and drain regions in said semiconductor film by ion doping, wherein said gate insulating film is formed using TEOS.

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58. (Amended) A method for fabricating a semiconductor device[, said semiconductor device having at least one thin film transistor comprising a crystalline semiconductor film formed adjacent to a gate electrode with a gate insulating film therebetween, said method] comprising the steps of:

forming at least two active matrix panels over a substrate, a method for fabricating each of said active matrix panels comprising:

forming a semiconductor film comprising amorphous silicon over a substrate;

forming an insulating film on said semiconductor film;

introducing boron into at least a portion of said semiconductor film through said insulating film, said portion becoming at least a channel formation region of said thin film transistor;

crystallizing at least said channel formation region of said semiconductor film by laser irradiation through said insulating film;

C16 cancel

removing said insulating film;

forming a gate insulating film on said semiconductor film;

forming a gate electrode on said insulating film;

forming source and drain regions in the said semiconductor film by ion doping; and

cutting said substrate into at least two portions to obtain two active matrix panels.

C17

65. (Amended) A method according to claim 58 wherein said gate insulating film comprises TEOS.

C18

68. (Amended) A method according to claim 29 wherein said semiconductor film is irradiated through said gate insulating film and said gate electrode after forming source and drain regions.

Please add new claims 85-96 as follows:

85. (New) A method according to claim 53, wherein said insulating film has a thickness of 10-500 nm.

C19 cont

86. (New) A method according to claim 55, wherein said insulating film has a thickness of 10-500 nm.

87. (New) A method according to claim 58, wherein said insulating film has a thickness of 10-500 nm.

88. (New) A method according to claim 12, wherein said semiconductor film is irradiated through said gate insulating film and said gate electrode after forming source and drain regions.

89. (New) A method according to claim 18, wherein said semiconductor film is irradiated through said gate insulating film and said gate electrode after forming source and drain regions.

90. (New) A method according to claim 23, wherein said semiconductor film is irradiated through said gate insulating film and said gate electrode after forming source and drain regions.

91. (New) A method according to claim 34, wherein said semiconductor film is irradiated through said gate insulating film and said gate electrode after forming source and drain regions.

92. (New) A method according to claim 37, wherein said semiconductor film is irradiated through said gate insulating film and said gate electrode after forming source and drain regions.

93. (New) A method according to claim 41, wherein said semiconductor film is irradiated through said gate insulating film and said gate electrode after forming source and drain regions.

94. (New) A method according to claim 53, wherein said semiconductor film is irradiated through said gate insulating film and said gate electrode after forming source and drain regions.

95. (New) A method according to claim 55, wherein said semiconductor film is irradiated through said gate insulating film and said gate electrode after forming source and drain regions.

96. (New) A method according to claim 58, wherein said semiconductor film is irradiated through said gate insulating film and said gate electrode after forming source and drain regions.